

ABSTRACT OF THE DISCLOSURE

Disclosed herein is a device including a plurality of optical senders for generating a plurality of optical signals to which forward error correction is applied, a scrambler for polarization scrambling each of the optical signals output from the optical senders, and an optical multiplexer for wavelength division multiplexing the optical signals to obtain WDM signal light. A scrambling frequency in the scrambler is set higher than a natural frequency in the forward error correction. Accordingly, high-quality transmission is allowed without interchannel crosstalk in WDM transmission.